

An Extraordinary New Subspecies of *Cercyonis oetus*
from Central Nevada¹
(Lepidoptera: Satyridae)

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The small dark woodnymph, *Cercyonis oetus* Boisduval, occurs from the western ridge of the Sierra Nevada to the eastern flank of the Rocky Mountains, in most of the mountain ranges of the western United States and north into western Canada. Three rather weakly differentiated subspecies are known (see Emmel, 1969, for review). *Cercyonis oetus oetus* Boisduval, with an acutely-angled mesial band and brownish secondaries ventrally, is found in the western third of the species' range. *Cercyonis oetus charon* Edwards, with mottled dark brown secondaries ventrally, is distributed from Arizona and New Mexico north to the Canadian border. *Cercyonis oetus phocus* Edwards has a uniform slate or black-brown phenotype and is found in British Columbia with occasional populations in adjacent areas.

Because of this relative uniformity of phenotype over a broad range, it was particularly surprising to find in 1969 an extraordinarily distinct set of populations in the center of Nevada. (Several specimens indicating a strange phenotype were taken here also in 1967.) The collectors, John F. Emmel and Oakley Shields, were able to secure nearly 80 specimens of both sexes from several localities in the Reese River Valley, west-southwest of Austin in Lander County. This region (5,700 feet elevation) is a relatively flat plain coated with bright white alkaline salts, making the habitat appear mantled by a thin layer of snow. Salt-bush (*Atriplex*), composites, and a few other herbs and grasses poke through the alkali crust. The whitish coloration of this new *Cercyonis* aids in concealment against such an environmental background.

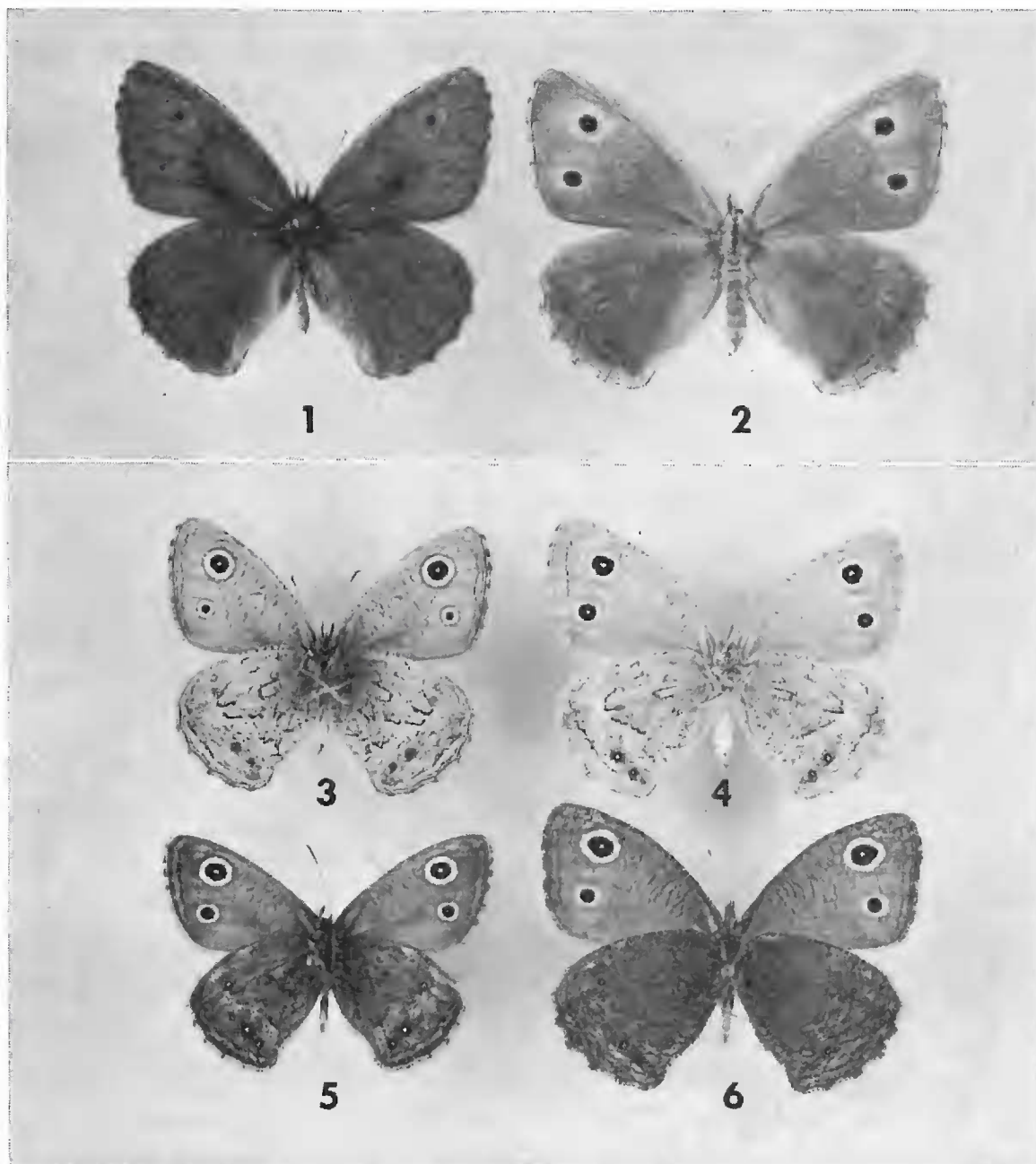
***Cercyonis oetus pallescens* Emmel & Emmel, new subspecies**

(Figs. 1, 2, 3, 4)

MALE.—*Forewing radius*: 19–21 mm. *Dorsal surface*: soft mouse gray-brown on both primaries and secondaries; in fresh specimens, noticeably lighter than

¹ Contribution No. 180, Bureau of Entomology, Division of Plant Industry, Florida Department of Agriculture and Consumer Services, Gainesville.

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FIGS. 1-4. *Cercyonis oetus pallescens* Emmel and Emmel, new subspecies. Dorsal (Fig. 1) and ventral (Fig. 3) surfaces of holotype male and dorsal (Fig. 2) and ventral (Fig. 4) surfaces of paratype female; both from 4 miles northeast of Reese River crossing of State Highway 2, 5,700 ft. elevation, west-southwest of Austin, Lander County, Nevada, 12 July 1969. FIG. 5. *Cercyonis oetus oetus* Boisduval, male, ventral surface, from Tioga Pass, Yosemite, California, 28 July 1960. FIG. 6. *Cercyonis oetus charon* Edwards, female, ventral surface, from Hyde State Park road, 7,900 ft. elevation, near Santa Fe, Sante Fe County, New Mexico, 1 August 1963.

coloration in all other subspecies. One black ocellus, lacking any lighter ring, on the forewing. Androconial distribution as in other subspecies. *Ventral surface*: Both forewings and hindwings heavily suffused with white scaling. Two forewing ocelli usually present, some specimens with one, three, or even four forewing ocelli; on hindwing, from none to six small ocelli. All ocelli almost always pupilled with bright white scales. Mesial band marked by dark brown zigzag lines on about half

the specimens. *Head, thorax, abdomen*: Same color as adjacent wing surfaces; thus quite white ventrally, in contrast to dark bodies of other named subspecies.

FEMALE.—*Forewing radius*: 21–23 mm. Coloration as for male but with two dorsal forewing ocelli and often three or four ventral forewing ocelli; white scaling even heavier on ventral surface of secondaries.

Holotype male, REESE RIVER VALLEY, 4 ROAD MILES NORTHEAST OF REESE RIVER CROSSING ON NEVADA HIGHWAY 2, 5,700 FT. ELEVATION, WESTSOUTHWEST OF AUSTIN, SOUTHWEST CORNER OF T. 19 NORTH, R. 43 EAST, LANDER COUNTY, NEVADA, collected 12 July 1969, by John F. Emmel and Oakley Shields, deposited in the senior author's collection at the University of Florida.

PARATYPES.—61 males, 9 females, from same locality and date as holotype; 5 males, 1 female, Reese River at old U. S. Highway 50, ca. 10 road miles west of Austin, 5,700 ft., Lander County, Nevada, 12 July 1969, same collectors. Paratypes deposited in collections of the Allyn Foundation, Los Angeles County Museum, California Academy of Sciences, Carnegie Museum, American Museum of Natural History, Florida State Collection of Arthropods, and the authors.

The name of this insect refers to its most distinctive feature: the whitish scaling on the ventral surfaces. It should be noted that each of the four species of *Cercyonis* is now known to contain such a form, found in arid, alkaline flats in the West:

Cercyonis pegala gabbi Edwards—Utah, basins near Great Salt Lake especially.

Cercyonis sthenele paulus Edwards—Nevada principally.

Cercyonis meadi alamosa Emmel & Emmel—San Luis Valley, Colorado.

Cercyonis oetus pallescens Emmel & Emmel—Reese River Valley, Nevada.

Genetic and physiological research on these situations and other adaptive strategies in the genus *Cercyonis* are currently in progress. Earlier publications (Emmel, 1969; Emmel & Emmel, 1969) give a general taxonomic treatment of these satyrids.

LITERATURE CITED

- EMMEL, T. C. 1969. Taxonomy, distribution and biology of the genus *Cercyonis* (Satyridae). I. Characteristics of the genus. *J. Lepidopt. Soc.*, 23: 165–175.
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